

# ZINC - INTRACOASTAL WATERWAY SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Zinc	45.36	19.88	16	36.04	13.68	9

Calculated Difference = 9.32  
 Standard Error of the Difference = 6.477819531  
 Degree of Freedom = 23  
 t = 1.438755735  
 p = 0.0818  
 Data sets significantly different = No

calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 site soil mean is not statistically greater than background mean

**4,4'-DDT - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
4,4'-DDT	0.00041103	0.0007962	17	0.0001555	0.00015569	9

Calculated Difference = 0.00025553  
 Standard Error of the Difference = 0.000199284  
 Degree of Freedom = 24  
 t = 1.28223903  
 p = 0.106  
 Data sets significantly different = No

calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 site soil mean is not statistically greater than background mean

# ALUMINUM - INTRACOASTAL WATERWAY SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Aluminum	6854	2346	16	12213	6892	9

Calculated Difference = 5359  
 Standard Error of the Difference = 2252.49071  
 Degree of Freedom = 23  
 t = 2.379144107  
 p = 0.013  
 Data sets significantly different = Yes

calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 site soil mean is statistically less than background mean

# ANTIMONY - INTRACOASTAL WATERWAY SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Antimony	2.245	1.751	16	4.023	2.215	9

Calculated Difference = 1.778  
 Standard Error of the Difference = 0.819130942  
 Degree of Freedom = 23  
 t = 2.170593136  
 p = 0.0203  
 Data sets significantly different = Yes

calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 site soil mean is statistically less than background mean

**ARSENIC - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Arsenic	4.026	1.4	16	5.813	3.107	9

Calculated Difference = 1.787  
 Standard Error of the Difference = 1.039537887  
 Degree of Freedom = 23  
 t = 1.719033066  
 p = 0.0495      calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 Data sets significantly different = Yes      site soil mean is statistically less than background mean

**BARIUM - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Barium	215.3	59.65	16	209.7	47.73	9

Calculated Difference = 5.6  
 Standard Error of the Difference = 20.90733397  
 Degree of Freedom = 23  
 t = 0.267848594  
 p = 0.3956  
 Data sets significantly different = No

calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 site soil mean is not statistically greater than background mean

**BENZO(B)FLUORANTHENE - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Benzo(b)fluoranthene	0.1	0.157	16	0.0087	0.0106	9

Calculated Difference = 0.0913  
 Standard Error of the Difference = 0.038225347  
 Degree of Freedom = 23  
 t = 2.388467508  
 p = 0.5      calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 Data sets significantly different = No      site soil mean is not statistically greater than background mean

**BERYLLIUM - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Beryllium	0.463	0.149	16	0.766	0.403	9

Calculated Difference = 0.303  
Standard Error of the Difference = 0.13246449  
Degree of Freedom = 23  
t = 2.287405473  
p = 0.0159      calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
Data sets significantly different = Yes      site soil mean is statistically less than background mean



# **BORON - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Boron	12.04	9.92	16	27.64	12.82	9

Calculated Difference = 15.6  
 Standard Error of the Difference = 4.714218044  
 Degree of Freedom = 23  
 t = 3.30913841  
 p = 0.0015  
 Data sets significantly different = Yes

calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 site soil mean is statistically less than background mean

**COBALT - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Cobalt	4.385	1.131	16	6.698	3.165	9

Calculated Difference = 2.313  
 Standard Error of the Difference = 1.037770333  
 Degree of Freedom = 23  
 t = 2.228816845  
 p = 0.0179      calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 Data sets significantly different = Yes      site soil mean is statistically less than background mean

# COPPER - INTRACOASTAL WATERWAY SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Copper	7.112	2.997	16	8.138	5.165	9

Calculated Difference = 1.026  
 Standard Error of the Difference = 1.787757246  
 Degree of Freedom = 23  
 t = 0.573903421  
 p = 0.2858  
 Data sets significantly different = No

calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 site soil mean is not statistically less than background mean

# IRON - INTRACOASTAL WATERWAY SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Iron	13352	5546	16	16496	8097	9

Calculated Difference = 3144  
 Standard Error of the Difference = 2892.307356  
 Degree of Freedom = 23  
 t = 1.087021403  
 p = 0.1441  
 Data sets significantly different = No

calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 site soil mean is not statistically less than background mean

# LEAD - INTRACOASTAL WATERWAY SEDIMENT

Compound	Site Conc. Mean	Site Conc. Standard Deviation	Number of Site Samples	Background Conc. Mean	Background Conc. Standard Deviation	Number of Background Samples
Lead	11.56	7.161	16	9.587	3.602	9

Calculated Difference = 1.973  
 Standard Error of the Difference = 2.076994545  
 Degree of Freedom = 23  
 t = 0.949930275  
 p = 0.1760  
 Data sets significantly different = No

calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 site soil mean is not statistically greater than background mean

**LITHIUM - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Lithium	10.53	3.559	16	21.4	14.41	9

Calculated Difference = 10.87  
 Standard Error of the Difference = 4.637876359  
 Degree of Freedom = 23  
 t = 2.343745102  
 p = 0.0141      calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 Data sets significantly different = Yes      site soil mean is statistically less than background mean

**MANGANESE - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Manganese	283.3	87.59	16	330.7	88.99	9

Calculated Difference = 47.4  
 Standard Error of the Difference = 35.25927685  
 Degree of Freedom = 23  
 t = 1.34432706  
 p = 0.0960  
 Data sets significantly different = No

calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 site soil mean is not statistically less than background mean

**MERCURY - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Mercury	0.0201	0.0073	16	0.0176	0.0132	9

Calculated Difference = 0.0025  
 Standard Error of the Difference = 0.004534171  
 Degree of Freedom = 23  
 t = 0.551368717  
 p = 0.5000      calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 Data sets significantly different = No      site soil mean is not statistically greater than background mean



**MOLYBDENUM - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Molybdenum	0.667	1.358	16	0.241	0.0675	9

Calculated Difference = 0.426  
 Standard Error of the Difference = 0.330054329  
 Degree of Freedom = 23  
 t = 1.290696598  
 p = 0.1048  
 Data sets significantly different = No

calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 site soil mean is not statistically greater than background mean

**NICKEL - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Nickel	9.589	2.741	16	14.91	8.111	9

Calculated Difference = 5.321  
 Standard Error of the Difference = 2.649675082  
 Degree of Freedom = 23  
 t = 2.008170751  
 p = 0.5000      calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 Data sets significantly different = No      site soil mean is not statistically less than background mean

**STRONTIUM - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Strontium	44.86	14.43	16	59.17	22.06	9

Calculated Difference = 14.31  
 Standard Error of the Difference = 7.804670623  
 Degree of Freedom = 23  
 t = 1.833517478  
 p = 0.0398      calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 Data sets significantly different = Yes      site soil mean is statistically less than background mean

**TITANIUM - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Titanium	25.58	5.051	16	31.79	10.49	9

Calculated Difference = 6.21  
 Standard Error of the Difference = 3.536205768  
 Degree of Freedom = 23  
 t = 1.756119527  
 p = 0.0462  
 Data sets significantly different = Yes

calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 site soil mean is statistically less than background mean

**VANADIUM - INTRACOASTAL WATERWAY SEDIMENT**

<b>Compound</b>	<b>Site Conc. Mean</b>	<b>Site Conc. Standard Deviation</b>	<b>Number of Site Samples</b>	<b>Background Conc. Mean</b>	<b>Background Conc. Standard Deviation</b>	<b>Number of Background Samples</b>
Vanadium	13.86	3.523	16	20.21	9.135	9

Calculated Difference = 6.35  
 Standard Error of the Difference = 3.012459534  
 Degree of Freedom = 23  
 t = 2.107912133  
 p = 0.0231  
 Data sets significantly different = Yes

calculated at [www.stat.tamu.edu/~west/applets/tdemo.html](http://www.stat.tamu.edu/~west/applets/tdemo.html)  
 site soil mean is statistically less than background mean